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A Holographic Josephson Junction BENSON WAY, GARY HOROWITZ, JORGE SANTOS, UCSB — We construct a gravitational dual of a Josephson junction. Calculations on the gravity side reproduce the standard relation between the current across the junction and the phase difference of the condensate. We also study the dependence of the maximum current on the temperature and size of the junction and reproduce familiar results.

Benson Way UCSB

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